

IN THE CLAIMS:

1 (cancelled)

2 (cancelled)

3 (cancelled)

4 (cancelled)

5 (cancelled)

6 (cancelled)

7 (cancelled)

8 (new). A method for generating/displaying a plane shape, comprising the steps of:

setting an equivalent normal line with a tangent plane in each vertex of a polygonal shape plane patch which is a basic form necessary for generating/displaying a shape, and setting a tangent line by decomposing said set normal line in a predetermined direction on an equivalent tangent plane; and

specifying a tangent line at position where an equivalent normal line with a new tangent plane between two corresponding vertexes and in a direction which is concerned with corresponding vertexes.

9 (new). A method for generating/displaying a plane shape, said method setting, at a specified position, an equivalent normal line with a tangent plane based on a predetermined normal line and on a specified position and tangent line information.

10 (new). A method for generating/displaying a plane shape, said method setting, at a specified position, an equivalent normal line with a tangent plane based on a predetermined normal line and on a specified position information.

11 (new). The method for generating/displaying a plane shape according to claim 9 or 10, wherein:

vertexes on which said predetermined normal line exists are combined;
a normal line existing at each predetermined vertex is decomposed on an equivalent tangent surface; and
a normal line at a position where an equivalent normal line with a new tangent

plane between two vertexes is set and in a direction which is concerned with two corresponding vertexes is specified.

12 (new). The method for generating/displaying a plane shape according to claim 8, wherein

vertexes on which a predetermined normal line exists are combined until a required shape generating/displaying accuracy is reached;

a normal line existing at each predetermined vertex is decomposed on an equivalent tangent surface;

steps of specifying a normal line at a position where a normal line equivalent with a new tangent plane between two vertexes is set and in a direction which is concerned with two corresponding vertexes is repeated; and

thus generating and displaying a shape of desire.

13 (new). A system for generating/displaying a plane shape, comprising a means for choosing a basic patch that possesses a normal line in each one of basic patches that constitute a polyhedron; wherein

for a basic patch that is chosen, vertexes on which said predetermined normal line exists are combined until a required shape generating/displaying accuracy is reached;

a normal line existing at each predetermined vertex is decomposed on an equivalent tangent surface;

steps of specifying a normal line at a position where an equivalent normal line with a new tangent plane between two vertexes is set and in a direction which is concerned with two corresponding vertexes is repeated; and

an operation for generating and displaying a shape of desire is controlled reflexively and sequentially;

thus generating/displaying a shape of desire.

14 (new). A recording medium for a program for generating/displaying a plane shape comprising a means for choosing a basic patch that possesses a normal line in each one of basic patches that constitute a polyhedron; wherein

for a basic patch that is chosen, vertexes on which said predetermined normal line exists are combined until a required shape generating/displaying accuracy is reached;

a normal line existing at each predetermined vertex is decomposed on an equivalent tangent surface;

steps of specifying a normal line at a position where an equivalent normal line with a new tangent plane between two vertexes is set and in a direction which is concerned with two corresponding vertexes is repeated; and

an operation for generating and displaying a shape of desire is controlled reflexively and sequentially;

thus generating/displaying a shape of desire.